

REMARKS / ARGUMENTS

The present application includes pending claims 1-33. Claims 1-33 have been rejected. By this Amendment, claims 1-8, 12-19, 23, 24, and 27-30 have been amended, as set forth above, to further clarify the language used in these claims and to further prosecution of the present application. Claims 9, 10, 20, 21, 31, and 32 have been withdrawn. Claims 34 and 35 have been added. The Applicant respectfully submits that the claims define patentable subject matter.

Initially, the Applicant notes that a goal of patent examination is to provide a prompt and complete examination of a patent application.

It is essential that patent applicants obtain a prompt yet complete examination of their applications. Under the principles of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for patentability in the *initial review* of the application, even if one or more claims are found to be deficient with respect to some statutory requirement. Thus, Office personnel *should* state *all* reasons and bases for rejecting claims in the *first* Office action. Deficiencies should be explained clearly, particularly when they serve as a basis for a rejection. Whenever practicable, Office personnel should indicate how rejections may be overcome and how problems may be resolved. A failure to follow this approach can lead to unnecessary delays in the prosecution of the application.

See Manual of Patent Examining Procedure (MPEP) § 2106(II). As such, the Applicant assumes, based on the goals of patent examination noted above, that the present Office Action has set forth "all reasons and bases" for rejecting the claims.

Claims 1, 5-6, 12, 16-17, 23, and 27-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 4,704,734 ("Menich") in view of US Patent No. 6,553,078 B1 ("Akerberg"). Claims 2-4, 13-15, and 24-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Menich in view of Akerberg, and further in view of US Published Application No. 2004/0203,550 A1 ("Xu"). Claims 7, 18, and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Menich in view of Akerberg, and further in view of US Published Application No. 2005/0095,987 A1 ("Lyons"). Claims 8, 19, and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Menich in view of Akerberg, and further in view of US Patent No. 5,530,926 ("Rozanski"). Claims 9, 20, and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Menich in view of Akerberg, and further in view of US Patent No. 6,327,481 B1 ("Nagashima"). Claims 10, 21, and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Menich in view of Akerberg, and further in view of US Patent No. 7,039,356 B2 ("Nguyen"). Claims 11, 22, and 33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Menich in view of Akerberg, Nguyen, and further in view of US Patent No. 6,456,647 B1 ("Banister").

The Applicant will address the points raised by the Examiner and demonstrate that the present invention is patentable. The Applicant respectfully traverses these rejections at least for the reasons discussed below.

CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure (“MPEP”) states the following:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the teaching. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

See MPEP at § 2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added). Further, MPEP § 2143.01 states that “the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination,” and that “although a prior art device ‘may be capable of being modified to run the way the apparatus is claimed, there must be a *suggestion or motivation in the reference* to do so’” (citing *In re Mills*, 916 F.2d 680, 16 USPQ 2d 1430 (Fed. Cir. 1990)). Moreover, MPEP § 2143.01 also states that the level of ordinary skill in the art cannot be relied upon to provide the suggestion...,” citing *Al-Site Corp. v. VSI Int’l Inc.*, 174 F.3d 1308, 50 USPQ 2d 1161 (Fed. Cir. 1999). Additionally, if a *prima facie* case of obviousness is not established, the Applicants are under no obligation to submit evidence of nonobviousness.

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

I. Claims 1, 5-6, 12, 16-17, 23, and 27-28 Are Not Unpatentable Over Menich in View of Akerberg

The Applicant has been asked to show that claims 1, 5-6, 12, 16-17, 23, and 27-28 in this case are non-obvious in view of the Menich and Akerberg references. The Applicant respectfully submits that these claims are non-obvious, for the reasons provided below.

With regard to the third criterion of MPEP § 2142 set forth above, independent claims 1, 12, and 23, from which claims 5-6, 16-17, and 27-28 are respectively dependent, recite collecting information “associated with at least one of a plurality of frames,” which the Menich reference does not disclose. See Office Action at pages 2-3. The Office Action asserts that the Akerberg reference teaches the collecting information “associated with at least one of a plurality of frames” received by a plurality of antennas for determining at least one starting antenna. See *Id.* at page 3. The Applicant respectfully submits, however, that Akerberg does not disclose or suggest determining a starting antenna based on “a majority polling scheme and a weighted sum filtering

scheme” of collected information from a plurality of received frames as disclosed in the currently amended independent claims 1, 12, and 23. The rejected claims are non-obvious for this reason alone, notwithstanding the Menich reference.

Additionally, with regard to the first criterion of MPEP § 2142 set forth above, there is no teaching, suggestion, or incentive for one of ordinary skill in the art to combine the Menich and Akerberg references to arrive at the present invention since neither the Menich nor the Akerberg references disclose “a majority polling scheme and a weighted sum filtering scheme” for determining a starting antenna.

For at least the reasons provided, claims 1, 5-6, 12, 16-17, 23, and 27-28 are non-obvious in view of the cited prior art.

II. The Proposed Prior Art Does Not Render Claims 2-4, 7, 8, 11, 13-15, 18, 19, 22, 24-26, 29, 30, 33, 34, and 35 Unpatentable

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1, 12, and 23 under 35 U.S.C. § 103(a) as being unpatentable over Menich in view of Akerberg has been overcome and requests that the rejection be withdrawn. Applicant respectfully submits that neither the Xu, Rozanski, nor Banister references overcome the deficiencies of Menich and Akerberg concerning “a majority polling scheme and a weighted sum filtering scheme”. See Office Action at pages 6, 7, and 10.

The Office Action, however, asserts that the Nagashima reference teaches the determining said at least one starting antenna based on a “majority polling scheme.” See Office Action at page 8. The Applicant respectfully submits that a temporary switching from one antenna to a next antenna based on an accumulated phase error being greater than a threshold level as disclosed in the Nagamishi reference does not correspond to a “majority polling scheme” as recited in the amended independent claims 1, 12, and 23 of the present invention. See Nagamishi col. 10, lines 51-55; code steps S208-S210 in Fig. 2B, and abstract.

The Office Action also asserts that the Nguyen reference teaches the determining said at least one starting antenna based on a “weighted sum scheme.” See Office Action at page 9. The Applicant respectfully submits that the use of weights $W(1)$ to weight $W(M)$ to generate and then sum the weighted signals 815(1) to 815(M) disclosed in Fig. 8 of the Nguyen reference does not correspond to the “weighted sum filtering scheme” recited in the amended independent claims 1, 12, and 23 of the present invention. See Nguyen Fig. 8, col. 6, lines 3-28.

With regard to the third criterion of MPEP § 2142 set forth above, neither the Nagamishi nor the Nguyen references disclose a “majority polling scheme” nor a “weighted sum filtering scheme” and the rejected claims are non-obvious for this reason alone. Additionally, with regard to the first criterion of MPEP § 2142 set forth above,

there is no teaching, suggestion, or incentive for one of ordinary skill in the art to combine the Menich, Akerberg, Nagamishi, and Nguyen references to arrive at the present invention since the references do not disclose “a majority polling scheme or a weighted sum filtering scheme” for determining a starting antenna as recited by the amended independent claims 1, 12, and 23 of the present invention.

The Applicant further submits that added claims 34 and 35 are allowable subject matter since the cited prior art neither discloses nor does it teach or suggest combination of the cited references for selecting a subsequent starting antenna “based a number of times said determined at least one starting antenna has been previously selected over a predetermined number of previously received frames” as recited in claim 34 or for filtering “collected received signal power information for each antenna in said portion of said plurality of antennas to generate a weighted sum filtered signal power for each antenna” as recited in claim 35.

For at least the reasons provided, claims 2-4, 7, 8, 11, 13-15, 18, 19, 22, 24-26, 29, 30, and 33, which are dependent on claims 1, 12, and 23, and added claims 34 and 35, are non-obvious in view of the cited prior art and the Applicant requests that the rejections be withdrawn. The Applicant reserves the right to argue additional reasons beyond those set forth above to support the allowability of the pending claims.

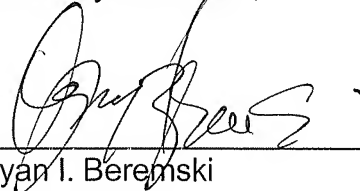
CONCLUSION

Based on at least the foregoing, the Applicant believes that all pending claims are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and requests that the Examiner telephone the undersigned Attorney at (312) 775-8176.

The Commissioner is hereby authorized to charge any additional filing fees which may be required in connection with this submission or credit any overpayment to Account No.13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,



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